

Amendments to the Drawings:

The attached sheet of drawings includes changes to Figure 2. This sheet, which includes Figure 2, replaces the original sheet. In Figure 2, typographical errors have been corrected.

Remarks/Arguments

In the present application, whenever a document is going to be included into a textual database for access on the internet, a semantic binder is automatically added off line to associate the document with one or more semantic nodes which are defined in a semantic taxonomy. When a search is performed, a search application looks through a semantic dictionary (which contains a table mapping queries to nodes on the semantic taxonomy) to see whether any corresponding semantic node can be applied to the searchers keyword query. If a match is found, the search application automatically transforms the user's query into ("original keyword query" OR "semantic node") without user intervention. Therefore, the internet is not only accessed directly by the users original keyword query but also by keyword queries with the terms identified by the semantic node so that relevant documents, even they do not contain keywords in user's query, can also be found in the database. The system binds semantic nodes arranged in a hierarchical structure of the taxonomy using a log analyzer which periodically looks through the system log for new keyword queries and through textual indices for documents added to the database to generate the semantic dictionary and to bind the semantic nodes to the keyword queries in the textual indices of the documents.

Claim Rejections under 35 USC 102

Claims 1 to 16 were rejected under 35 USC 102(e) as being anticipated by Omoigie (USPAP 2003/0126136).

As pointed out above, the present application describes a search system that automatically attaches a semantic node to a users original query so that relevant documents can be found in a database even though they do not contain keywords in users queries. Claims 1 and 9 both call for such a system which automatically enhance a users keyword query by adding a semantic node term applicable to the users query. The Examiner cites paragraphs 510, 74 and 217 of the Omoigui reference against claims 1 and 9 as teaching use of such enhanced queries. Applicants attorney did not find such a teaching in these paragraphs. Paragraph 510 deals with publishing and sharing of Agents. There is nothing in paragraph 510 about automatically modifying a users keyword query by adding a semantic node to expand a users search. Paragraph 74, lines 14 to 17 deals with the use of Agents with other applications. There is no mention in these lines about automatically modifying a users keyword query by adding a related semantic node. Paragraph 217, lines 24 to 27, mentions that the user has semantic means of navigating. There is no mention in the paragraph on automatically modifying a users keyword query by addition of a related semantic node term. In fact, there is no mention of keyword queries at all in the above sections cited by the Examiner. Further, the definition in paragraph 273 of Semantic Queries used in Omoigui clearly distinguishes such queries from “keyword queries” claimed in claims 1 and 9. Therefore, claims 2 and 10 distinguish from the Omoigui since there is no mention in paragraphs 510, 74 and/or 217 of keyword queries let alone automatic modification of a users keyword query by addition of a semantic node term as claimed in claims 1 and 9.

In rejecting claims 2 and 10, the Examiner cites paragraphs 466 and 217 of Omoigui. Paragraph 466 does not mention keyword queries. Further, it

specifically calls for user participation and is therefore not automatic. It calls for a user to select an object to “link to” and in linking to, “browsing and modifying and add or remove.” As pointed out above, the cited section of paragraph 217 does not discuss keyword queries. Therefore, neither of the paragraphs of Omoigui cited against claims 2 and 10 teaches providing an enhanced search query that automatically includes both “the users keyword search query OR the semantic node” as claimed in claims 2 and 10. Claims 2 and 10 depend from claims 1 and 9, respectively. Therefore, claims 2 and 10 distinguish from the prior art for the reasons given above for claims 1 and 9 in addition to the reasons given in this paragraph.

In rejecting claims 3 and 11, the Examiner cites paragraph 638 of Omoigui. Paragraph 638 deals with the Server Side Semantic Query Processor (SQP) of Omoigui. SQP responds to semantic queries from clients. As pointed out above, semantic queries are distinguished from keyword queries by definition in paragraph 278, lines 3 to 5. Claims 3 and 11 call for a dictionary that defines keyword query terms in user queries in accordance with semantic nodes not with a processor for handling semantic queries. Therefore, claims 3 and 11 do not read on paragraph 638. In addition, claims 3 and 11 depend from claims 2 and 10. Therefore, claims 3 and 11 distinguish from the Omoigui patent for the reasons given above for claims 1 and 9 and claims 2 and 10 in addition to the reasons given in this paragraph.

With respect to claims 4, and 12, the Examiner cites paragraph 1319 of Omoigui as disclosing a semantic dictionary builder. Claims 4 and 12 call for

increasing keyword terms in a semantic dictionary and by adding them with one or more semantic nodes. Paragraph 1319 deals with adding Agents to an Agent list. There is no mention of keyword terms or examining a system log for the purpose of adding such terms to a semantic node of a keyword dictionary. Therefore, paragraph 1319 does not teach a semantic dictionary builder that adds keyword terms and associates them with semantic node as claimed in claims 4 and 12. Claims 4 and 12 depend from claims 3 and 11, respectively. Therefore, claims 4 and 12 are distinguishable from the Omoigui reference for the reasons given for claims 1,2 , 3, 9, 10 and 11 in addition to the reasons given in this paragraph.

The Examiner cites paragraphs 1319 and 1112 of Omoigui against claims 5 and 13. Neither reference discusses using enhanced queries to place keyword query terms in order of the number of times that they are used to shorten table lookup times, as claimed in claims 5 and 13. Claims 5 and 13 depend from claim 4.

For the reasons given above, claims 1, 2, 4, 5, 9, 10, 12 and 13 all distinguish from the prior art. The other dependent claims depend from either claims 1 and 9 through other depended claims and therefore distinguish over the prior art for the same reasons as those given for claims 1 and 9 and those other dependent claims. They also contain further limitations that also distinguish them from the prior art.

The structures of the Omoigui reference and the present invention serve different purposes. The Omoigui reference provides for a system for responding to semantic queries. As opposed to this, the present application provides for

enhancement of a users traditional keyword query of the internet by addition of other related keyword queries. What appears to the applicants' attorney is that the Examiner went through the Omoigui reference and selected portions of the Omoigui which he considered applicable to the present application. However as discussed in detail above, the cited sections do not anticipate applicants' claims involving enhancement for accessing the internet in the traditional manner but relate to a semantic system to obtain desired references. The disparity of the purposes of the teaching of the present application and Omoigui make it clear that these sections differ both in content and purpose from the language and intent of the claims in the present application.

Objections to the Specification


The objection the Examiner has to the specification as not disclosing the type of medium used to store computer programs is disingenuous. As pointed out previously, it is equivalent to stating that a specification in an application calling for a car and claims the car as having tires is deficient because it does specify the type of tires recited in the claims covering the car. Both the type of tires used on automobiles and the materials used to store computer programs are well known in the prior art and serve no purpose in defining the invention. Whether the tires are radials or 4 ply, or the storage medium magnetic or optical is immaterial.

The Specification and Drawings

The changes to page 9 of the specification, and Figure 2 of the drawings, are to correct typographical errors. The changes to page 1 are to update the information about the references cited on that page.

For the above reasons, it is respectfully submitted that all claims are allowable, and therefore it is requested that the application be reconsidered, allowed and passed to issue.

RESPECTFULLY SUBMITTED,


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